



Outline

- What is the Digital Economy?
- What is Digital Trade?
 - Handbook on Measuring Digital Trade
- How do we collect statistics?
 - Manual on Production of Statistics on the Digital Economy
- Key data gaps
- UNCTAD Working Group on Measuring E-commerce and the Digital Economy



Measuring e-commerce and digital economy - Torbjörn Fredrikson (Head, E-commerce and Digital Economy Branch UNCTAD)

Measuring E-commerce and the Digital Economy

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What is the digital economy?

1. Hard to define

- Multi-faceted
- Cuts across sectors and industries
- Affects both what is produced and how
- Both tangible and abstract

2. Hard to agree on

- Different perspectives
- How "digital" is enough?

Drawing definitive boundaries is challenging - iterated definition of the digital economy

- This example presented in the UNCTAD Manual, adapted from OECD report for the G20 (2020)
- Emphasises:
 - the nature of transactions producers
 - but producers belong to the different "measures" of the digital economy based on the nature of the products they make (digital or not) and also how "relaxed" they are on digital inputs for production



Global digital economy

2017 estimates range from:
Narrow definition: **4.5%** of GDP

By the **US** 2017 estimates range from:
Narrow definition: **6.0%** of GDP

In **China** they range from:
Narrow definition: **6%** of GDP

Broad definition: **15.5%** of GDP

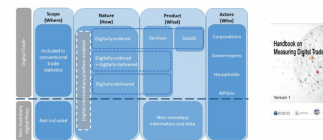
Broad definition: **21.6%** of GDP

Broad definition: **30%** of GDP

Some definitions

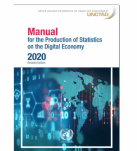
- ✓ **E-commerce:** "The sale or purchase of a good or service, conducted over computer networks by methods specifically designed for the purpose of receiving or placing orders."
 - Payments can be online or offline; delivery can be physical or digital
 - Equivalent to "digitally ordered trade" when involving cross-border transactions
- ✓ **Digitally delivered trade:** "International transactions that are delivered remotely in an electronic format, using computer networks specifically designed for the purpose."
- ✓ **Digital trade:** Any trade that is the result of digitally placed orders and/or is digitally delivered.

What is Digital Trade?



UNCTAD measurement of ECDE

1. Core indicators on the digital economy
 - Products
 - ICT assets base (from COMSTAT2)
 - ICT services trade (from BOP)
 - ICT enabled digital delivered services trade (Spencer)
 - Production
 - ICT sector employment and value added (SIC flow)
 - ICT usage in business (surveys)
 - Transactions
 - E-commerce (surveys)
2. Guidance on how to compile them
 - Data sources and methods
 - Survey design
 - Mobile questionnaire questions
 - Recommended breakdowns
3. Guidance on presentation and dissemination



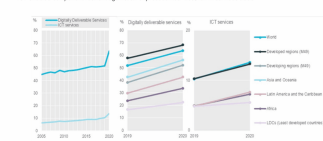
Other Manuals from the Partnership

Partnership on Measuring ICT for Development

Key data gaps

- ✓ Business use of ICT, from developing countries, especially LDCs
- ✓ E-commerce value
 - Total
 - B2C
 - B2B
 - Cross border - collected by very few countries
- ✓ Digitally delivered trade in services
 - BOP can generate estimates of digitally deliverable services trade
 - Surveys required to measure ICT enabled/digitally delivered services trade
 - Conducted by Costa Rica and India

Shares of ICT services and Digitally Deliverable services in services trade shot up in 2020



Source: UNCTAD and WFP, Handbook on Measuring Digital Trade

Digitally deliverable vs Digitally delivered services

- Measuring the share of services actually digitally delivered entails collecting additional information
- UNCTAD collaborated with partner countries (Costa Rica, India, Thailand) to develop a pilot
 - targeted at resident service-exporting enterprises and financial services
- ➔ Suggest 80% of digitally deliverable are digitally delivered
- ➔ UNCTAD can support and collaborate with more countries to implement surveys



Source: adapted from measuring survey on the reports of ICT enabled services

Case of Costa Rica (1)

Main ICT enabled services within the BOP	2016	2018	2017	2018
Government and business services	0	1	1	1
Financial services	45	55	55	45
Manufacturing services	1,892	1,895	1,895	1,895
Transportation services	11	11	11	11
Computer services	228	884	1,076	1,025
Telecommunications services	471	88	79	79
Other business services	2,487	2,585	2,585	2,585
Research and development	152	169	152	169
Professional and management consulting services	2,168	2,839	2,863	2,863
Technical, information and other business services	264	237	182	181
TOTAL	3,876	4,912	4,234	4,827

• Potentially ICT-Enabled

Costa Rica (2)

Exports of ICT-enabled services by type	Services Exports	Exports of ICT-Enabled services	Share (%)	
Government and business services	0	24	100	
Financial services	1	760	699	92
Manufacturing services	187	169	96	
Transportation services	15	15	100	
Computer services	92	92	100	
Telecommunications services	2,412	2,398	99	
Other business services	2	2	100	
Research and development	0	200	197	98
Professional and management consulting services	3	2	67	
Technical, information and other business services	3	2	67	
TOTAL	3,895	3,739	96	

Working Group on Measuring E-commerce and the Digital Economy

- Second meeting: 3-4 May 2021
- Among topics: Non-survey sources of data to supplement the traditional measurement of e-commerce and the digital economy
 - UN Committee of Experts on Big Data and Data Science for Official Statistics (UN-CEBS): mobile data, scanner data and web-scraping for price statistics, access to private sector data, primary preserving techniques, and training
 - UN-CEBS: big data project to measure the digital economy; innovative measurement needed to have meaningful information on online activities, enterprise digitalization, fintech, etc.
 - Eurasia: bilateral agreement on data exchange with four large international platforms on short-term accommodation - model for UN?

Working Group on Measuring E-commerce and the Digital Economy: proposed topics in 2022

- Progress in measuring e-commerce and the digital economy work by relevant international organizations, including in terms of providing knowledge resources in multiple languages
- Defining the digital economy for statistical purposes;
- Mechanisms to implement web scraping techniques and facilitate data transfers between providers and producers to produce official statistics on e-commerce and the digital economy;
- Measuring the gender dimension in e-commerce and the digital economy.

Download the full report for free here

<https://unctad.org/webflyer/digital-economy-report-2021>

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Thank You!